4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 ~ 5.25GHz	4dBm
5.25 ~ 5.35GHz	11dBm
5.725 ~ 5.825GHz	17dBm

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.5.3 TEST PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP

4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

4.5.7 TEST RESULTS (Mode 1)

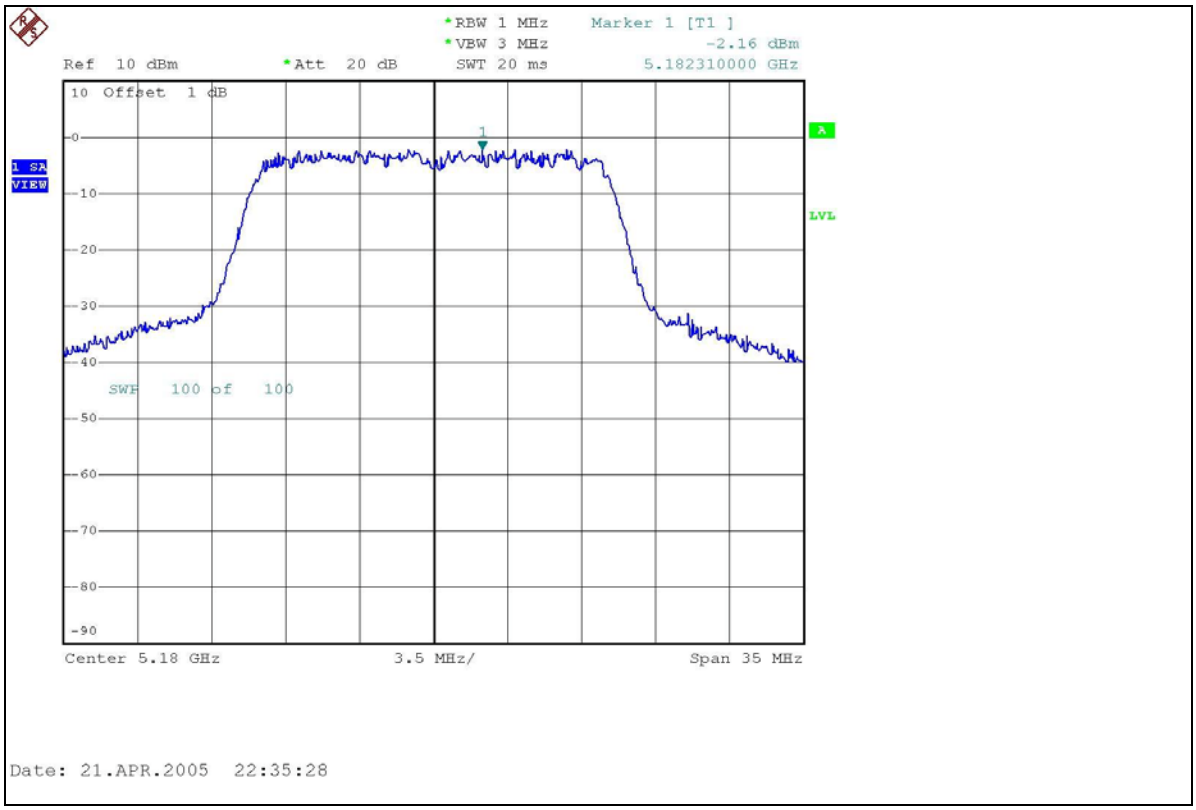
802.11a OFDM modulation

EUT	Bridging kit - 802.11a	**MODEL**	WL-464
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 62%RH, 960hPa
TESTED BY	Rex Huang		

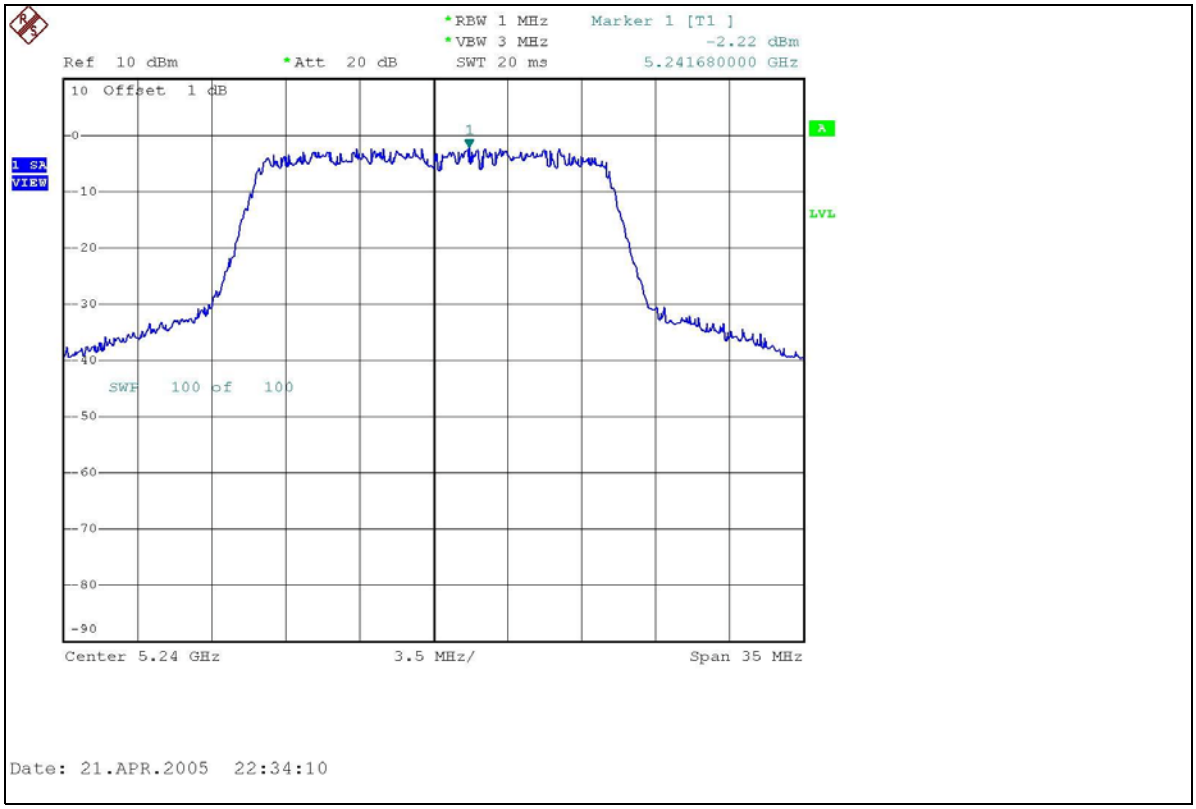
Antenna 1 (Gain : 8 dBi) +Cable loss (1.2dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-2.16	3.2	PASS
4	5240	-2.22	3.2	PASS
5	5260	4.41	10.2	PASS
8	5320	2.96	10.2	PASS

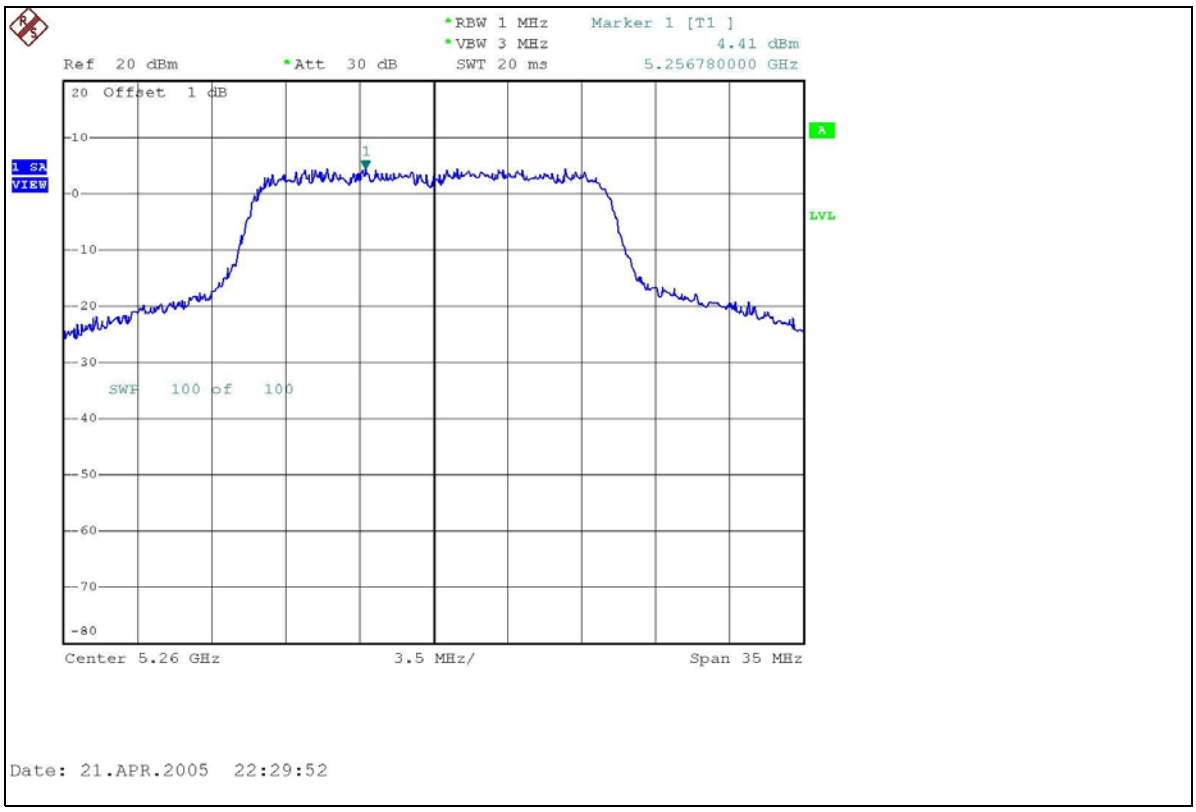
CH1



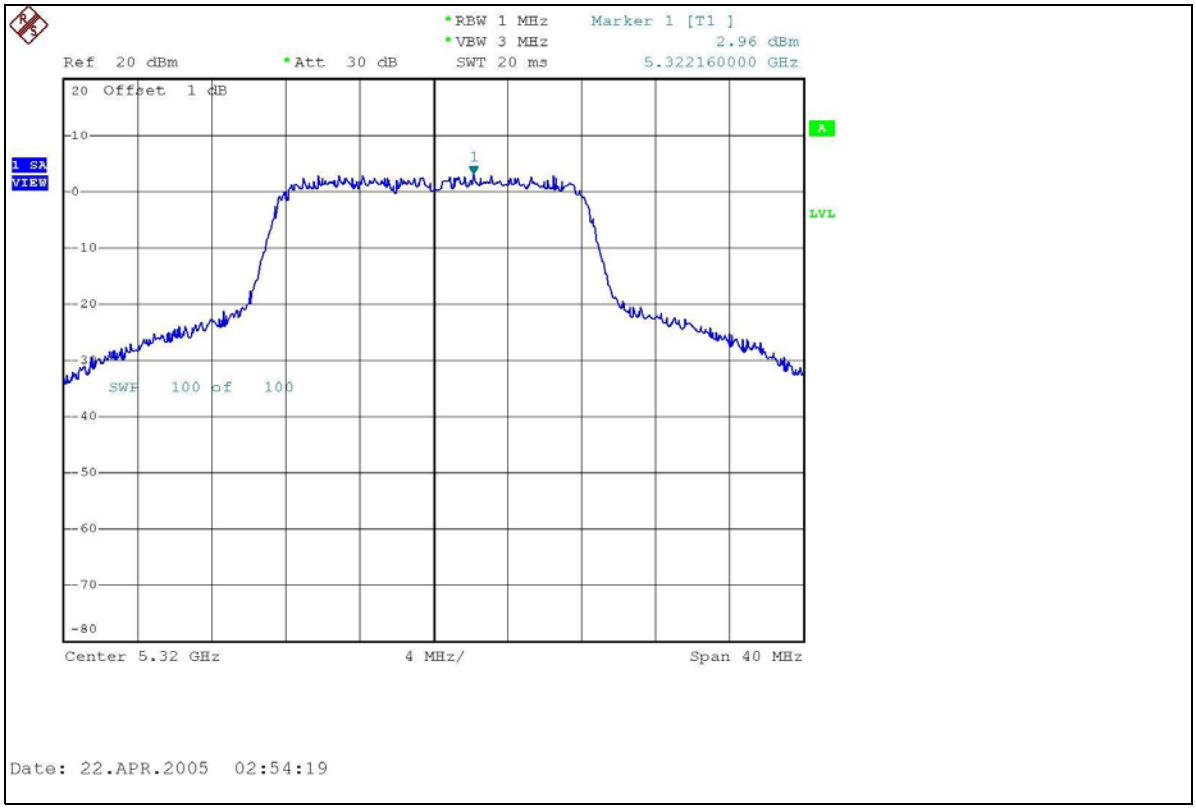
CH4


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-2.22 dBm
5.241680000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 21.APR.2005 22:34:10

CH5


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
4.41 dBm
5.256780000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 21.APR.2005 22:29:52

CH8


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
2.96 dBm
5.322160000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.32 GHz
4 MHz/
Span 40 MHz
Date: 22.APR.2005 02:54:19

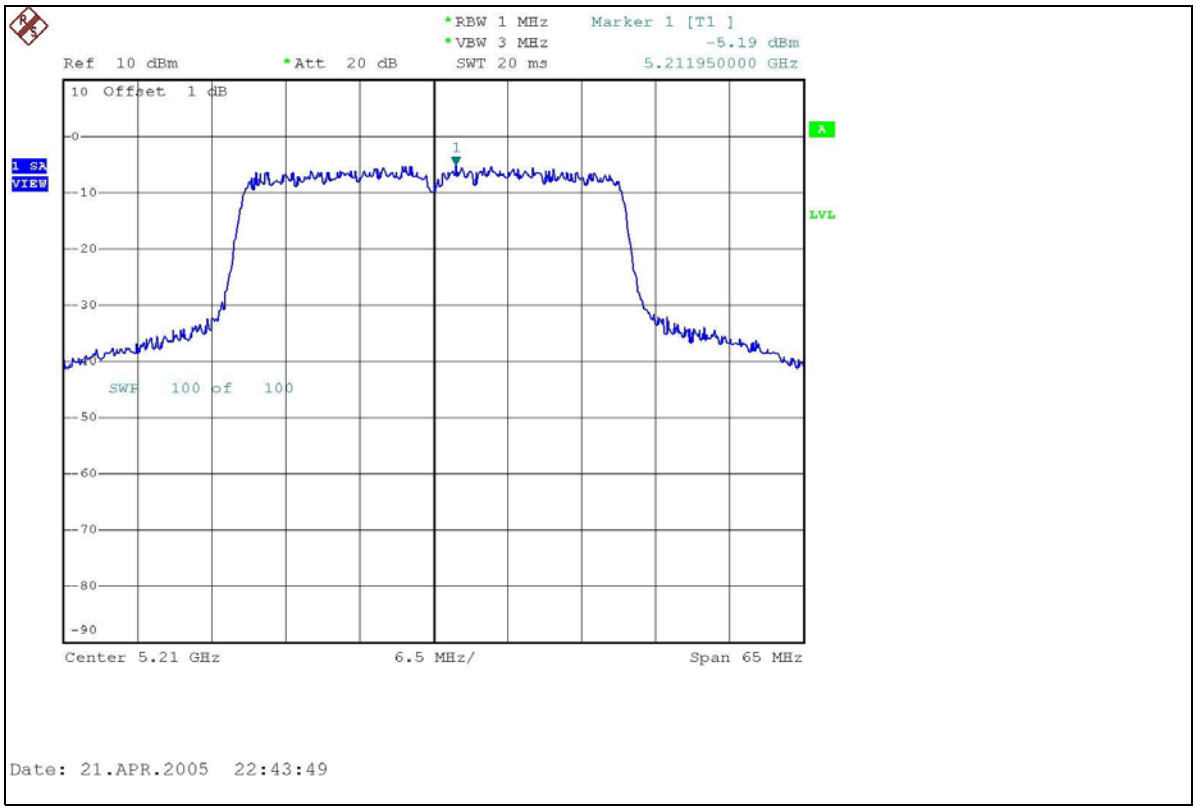
802.11a Turbo OFDM modulation

EUT	Bridging kit - 802.11a	**MODEL**	WL-464
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 62%RH, 960hPa
TESTED BY	Rex Huang		

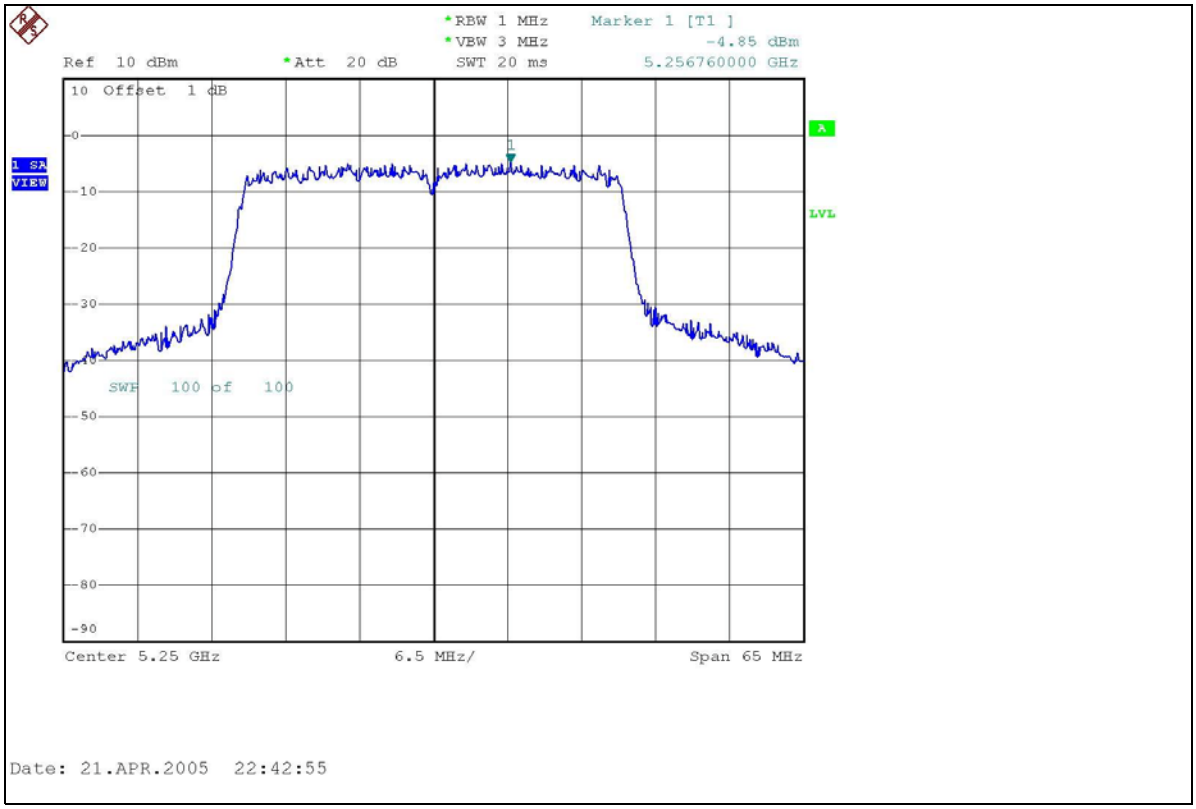
Antenna 1 (Gain : 8 dBi) +Cable loss (1.2dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-5.19	3.2	PASS
2	5250	-4.85	3.2	PASS
3	5290	0.48	10.2	PASS

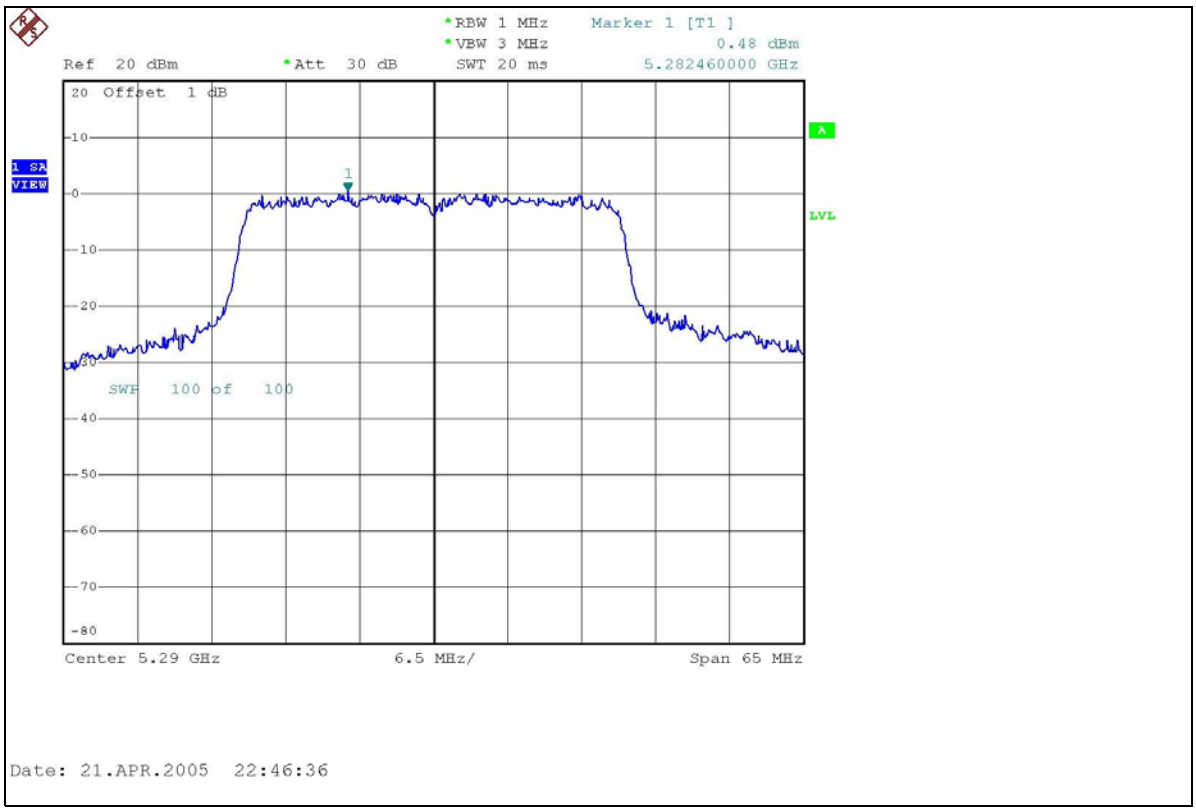
CH1



CH2


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-4.85 dBm
5.256760000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.25 GHz
6.5 MHz/
Span 65 MHz
Date: 21.APR.2005 22:42:55

CH3


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
0.48 dBm
5.282460000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.29 GHz
6.5 MHz/
Span 65 MHz
Date: 21.APR.2005 22:46:36

4.5.8 TEST RESULTS (Mode 2)

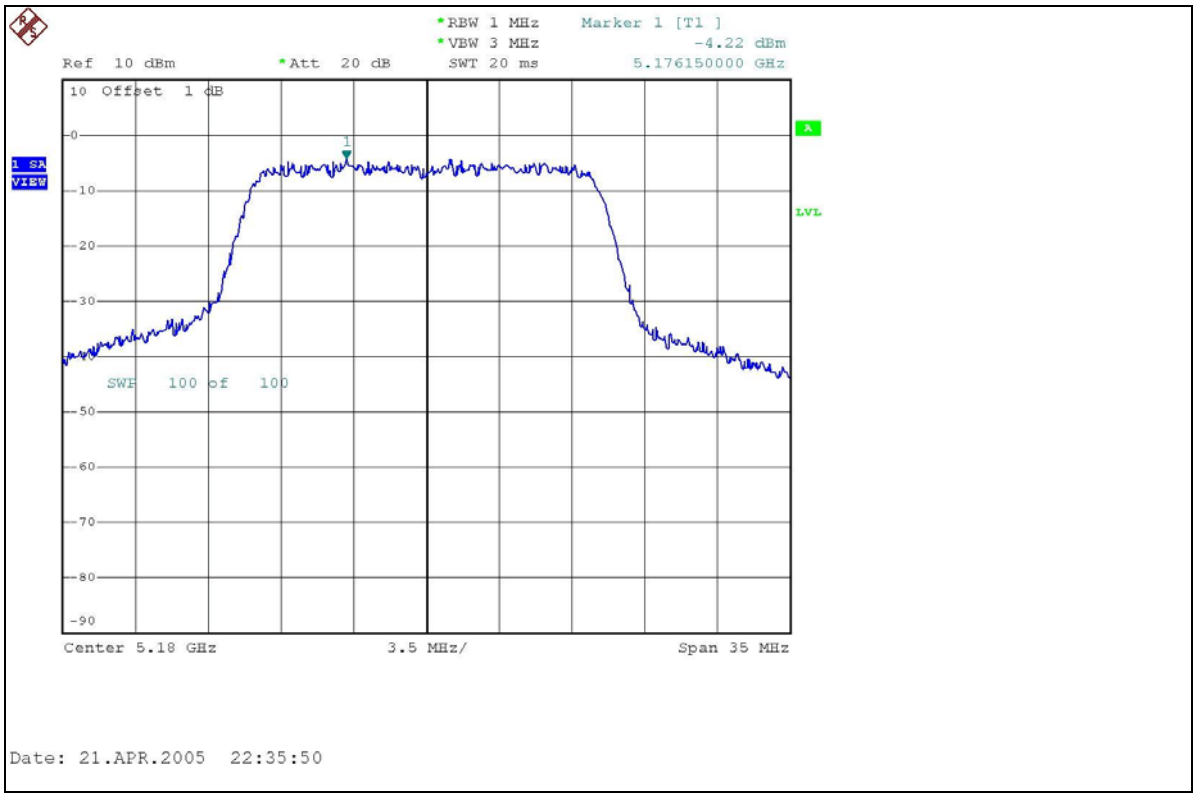
802.11a OFDM modulation

EUT	Bridging kit - 802.11a	**MODEL**	WL-464
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 62%RH, 960hPa
TESTED BY	Rex Huang		

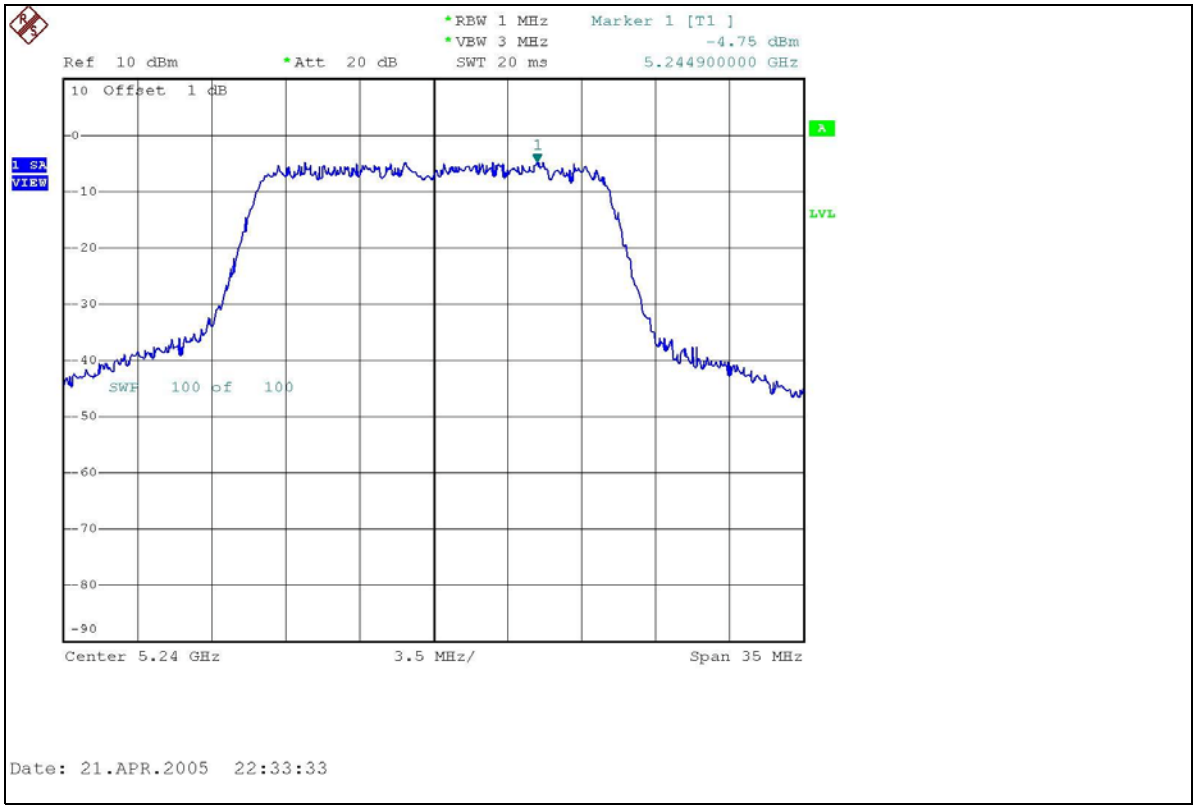
Antenna 2 (Gain : 10 dBi) +Cable loss (1.2dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-4.22	1.2	PASS
4	5240	-4.75	1.2	PASS
5	5260	2.69	8.2	PASS
8	5320	2.54	8.2	PASS

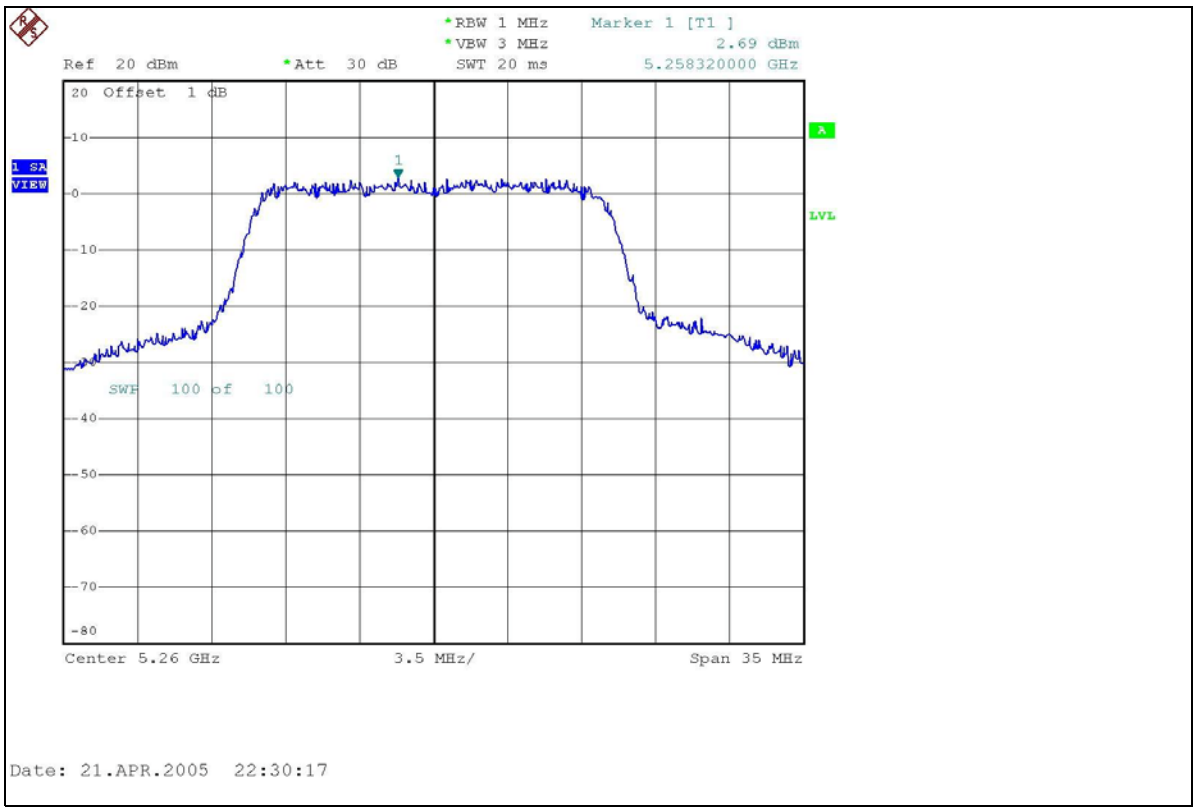
CH1



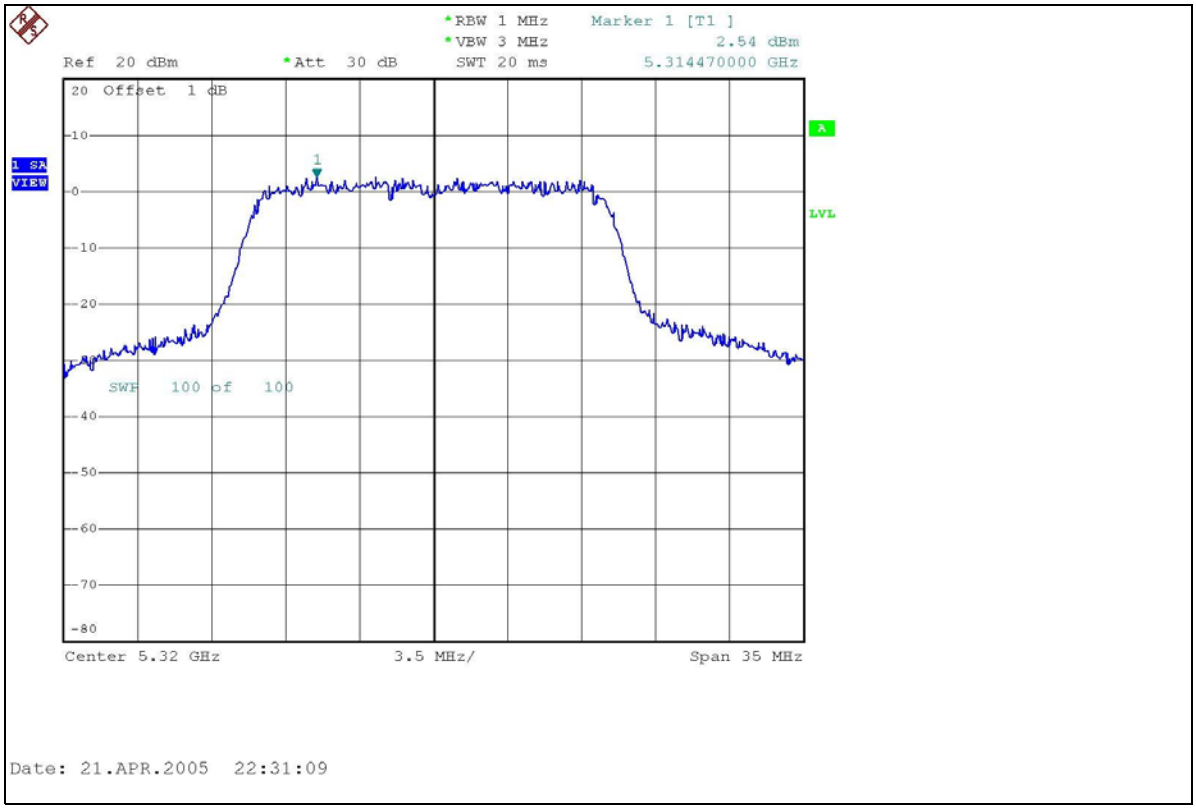
CH4


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-4.75 dBm
5.244900000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
Date: 21.APR.2005 22:33:33

CH5


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
2.69 dBm
5.258320000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
Date: 21.APR.2005 22:30:17

CH8


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
2.54 dBm
5.314470000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
Date: 21.APR.2005 22:31:09

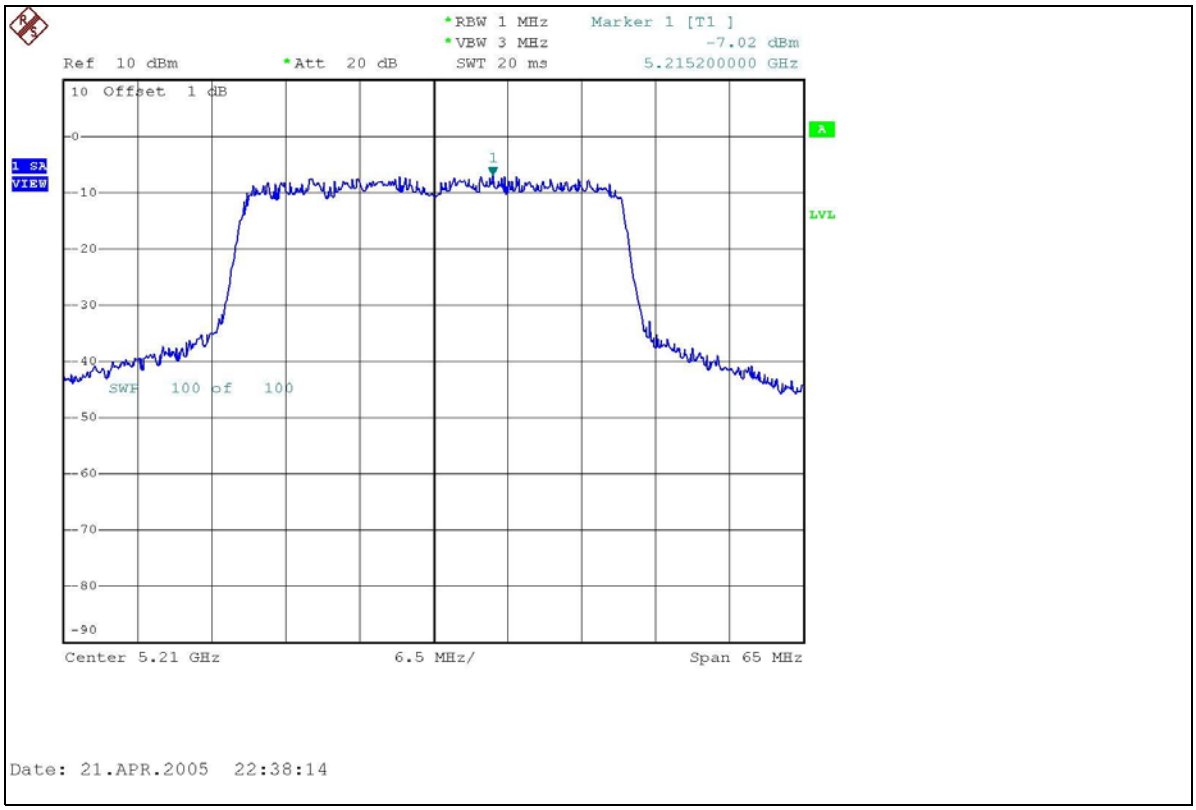
802.11a Turbo OFDM modulation

EUT	Bridging kit - 802.11a	**MODEL**	WL-464
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 62%RH, 960hPa
TESTED BY	Rex Huang		

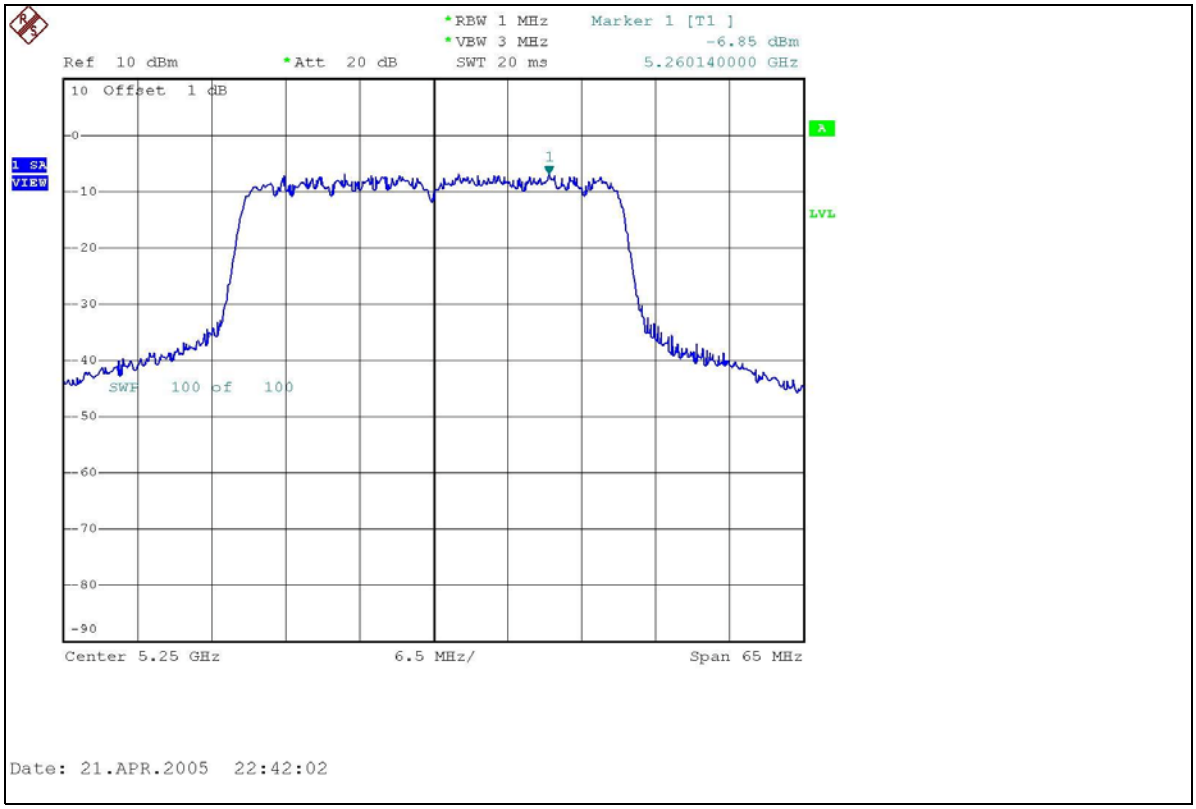
Antenna 2 (Gain : 10 dBi) +Cable loss (1.2dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-7.02	1.2	PASS
2	5250	-6.85	1.2	PASS
3	5290	-0.17	8.2	PASS

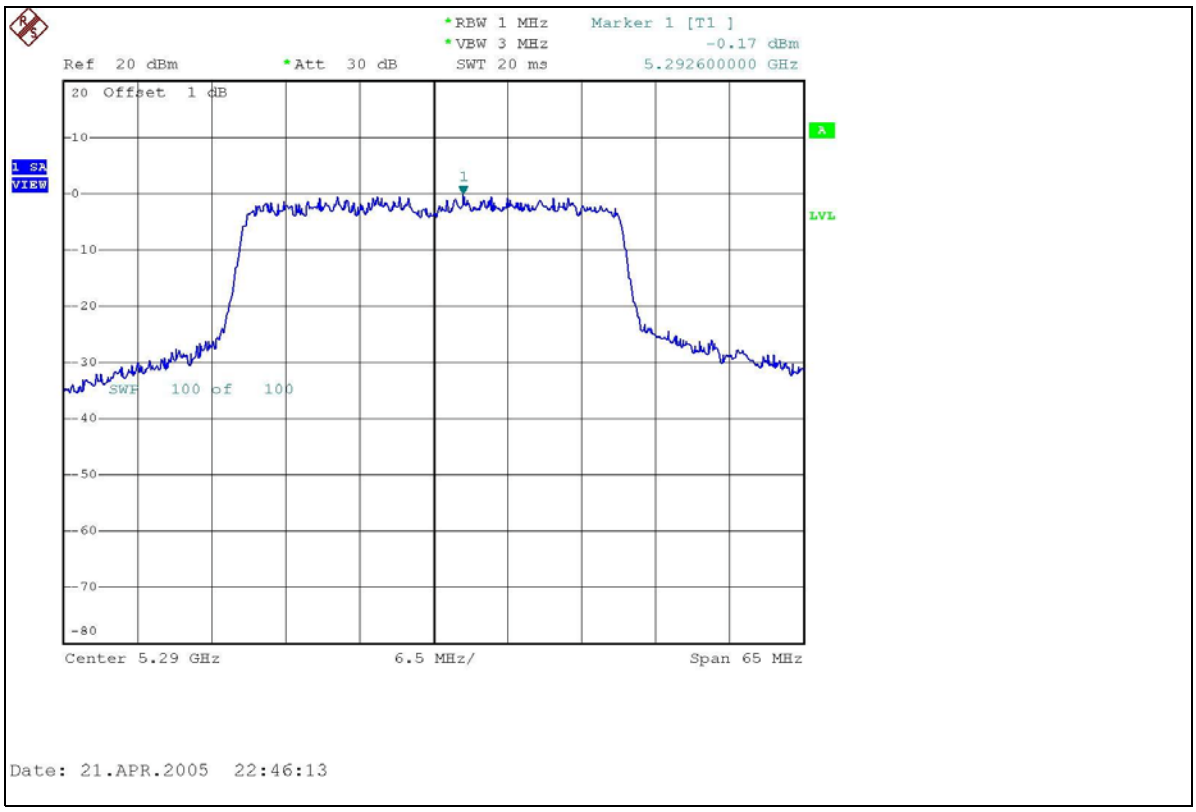
CH1



CH2


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-6.85 dBm
5.260140000 GHz
Ref 10 dBm
*Att 20 dB
10 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.25 GHz
6.5 MHz/
Span 65 MHz
Date: 21.APR.2005 22:42:02

CH3


*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
-0.17 dBm
5.292600000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 1 dB
1 SA
VIEW
A
LVL
SWP 100 of 100
Center 5.29 GHz
6.5 MHz/
Span 65 MHz
Date: 21.APR.2005 22:46:13